

## **AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

### **LISTING OF CLAIMS:**

1. (currently amended): A method for culturing cells, which comprises the steps of:  
  
causing cells to adhere to ~~the~~ a surface of a cell array substrate having a cell adhesiveness variation pattern that comprises a first region[[s]] where at least part of population of the cells adhere having good cell adhesiveness and a second region[[s]] where the at least part of population of the cells does not adhere, to give a cell array substrate with the cells adhered to the first region in a patterned state, having inhibited cell adhesiveness patterned on a substrate;  
  
transferring the adhered cells to a cell culture substrate in ~~such the~~ the patterned state; and  
  
culturing the transferred cells,  
  
wherein the transferring step comprises removing the cells from the first region without enzymatic degradation or lowering temperature.
  
2. (currently amended): The method according to claim 1, wherein the first region[[s]] ~~having good cell adhesiveness~~ in the cell adhesiveness variation pattern ~~have~~ has water contact angles between 10° and 40°.
  
3. (original): The method according to claim 1 or 2, wherein the cell adhesiveness variation pattern is formed of a cell adhesiveness variation layer that comprises a cell adhesiveness variation material whose cell adhesiveness is varied by the action of a photocatalyst along with energy irradiation.

4. (original): The method according to claim 3, wherein the cell adhesiveness variation layer is a photocatalyst-comprising cell adhesiveness variation layer that comprises a photocatalyst and the cell adhesiveness variation material.

5. (original): The method according to claim 3, wherein the cell adhesiveness variation layer comprises a photocatalyst-comprising photocatalyst treatment layer and a cell adhesiveness variation material layer that comprises the cell adhesiveness variation material formed on the photocatalyst treatment layer.

6. (original): The method according to claim 3, wherein the cell adhesiveness variation pattern is formed by arranging the cell adhesiveness variation layer that comprises the cell adhesiveness variation material and the photocatalyst-comprising layer so that the layers face each other, and then carrying out energy irradiation.

7. (previously presented): The method according to claim 1, wherein the cell culture substrate is made of a biomaterial.

8. (currently amended): The method according to claim 1, wherein the cell adhesiveness variation pattern is a pattern wherein the first linear region[[s]] having good cell adhesiveness is arranged on the second region[[s]] having inhibited cell adhesiveness, said first region being linear.

9. (currently amended): The method according to claim 1, wherein the cell adhesiveness variation pattern is a pattern wherein ~~linear~~ the first region[[s]], ~~which is linear, having good cell adhesiveness and a space~~[[s]] comprised of the second region[[s]] ~~having inhibited cell adhesiveness~~ are arranged alternately, the line width[[s]] of the first region[[s]] ~~is having good cell adhesiveness~~ are each between 20  $\mu\text{m}$  and 200  $\mu\text{m}$ , the space widths between such lines are each between 300  $\mu\text{m}$  and 1000  $\mu\text{m}$ , and the cells used are vascular endothelial cells.

10. (withdrawn): A cell tissue, which is formed by the method according to claim 1.

11. (withdrawn-currently amended): A cell adhesion substrate comprising a cell array substrate having ~~the~~ a cell adhesiveness variation pattern that comprises a first region[[s]] ~~where at least part of population of the cells adhere~~ having good cell adhesiveness and a second region[[s]] ~~where the at least part of population of the cells do not adhere~~ having inhibited cell adhesiveness ~~patterned on a substrate~~ wherein cells are adhered to the first region[[s]] having good cell adhesiveness in a cell adhesiveness variation pattern in the cell array substrate.

12. (withdrawn - currently amended): The cell adhesion substrate according to claim 11, wherein the first region[[s]] ~~having good cell adhesiveness~~ in the cell adhesiveness variation pattern ~~have~~ has water contact angles between 10° and 40°.

13. (withdrawn): The cell adhesion substrate according to claim 11 or 12, wherein the cell adhesiveness variation pattern is formed of a cell adhesiveness variation layer that comprises

a cell adhesiveness variation material whose cell adhesiveness is varied by the action of a photocatalyst along with energy irradiation.

14. (withdrawn): The cell adhesion substrate according to claim 13, wherein the cell adhesiveness variation layer is a photocatalyst-comprising cell adhesiveness variation layer that comprises a photocatalyst and the cell adhesiveness variation material.

15. (withdrawn): The cell adhesion substrate according to claim 13, wherein the cell adhesiveness variation layer comprises a photocatalyst-comprising photocatalyst treatment layer and a cell adhesiveness variation material layer formed on the photocatalyst treatment layer that comprises the cell adhesiveness variation material.

16. (withdrawn): The cell adhesion substrate according to claim 13, wherein the cell adhesiveness variation pattern is formed by arranging the cell adhesiveness variation layer that comprises the cell adhesiveness variation material and the photocatalyst-comprising layer so that the layers face each other, and then carrying out energy irradiation.

17. (withdrawn): A method for regenerating a tissue of a subject, which comprises transferring cells derived from a subject and caused to adhere to the above cell adhesion substrate according to claim 11 onto a biological tissue of the subject in a patterned state and then growing the cells.

18. (new): The method of according to claim 1, wherein the cells are comprised of two or more types of cells and the cell adhesiveness variation pattern comprises two or more of the first regions to which at least one type of the cells adhere, and two or more of the second regions to which the at least one type of the cells do not adhere.